
Oregon Agricultural College Experiment Station

The Peach and Prune Twig-Miner

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Fig. 1. Photographs of (A) eight-year-old; and (B) five-year-old peach trees showing typical twig-miner injury; (C) tree in same block with (B) sprayed with lime-sulfur in spring.

The Peach and Prune Twig-Miner

The peach and prune twig-miner is a serious pest of prune, peach, and apricot in Oregon. The injury is done by the larvae tunneling down the interior of the terminal twigs and killing them. More recently the pest has been found eating into the fruit. Wormy peaches and particularly apricots, have been sufficiently common to cause serious concern.

Description. The worm is of a pinkish or brownish hue, nearly one-half inch in length, found in the burrow at the base of a wilted tip or spur or working about the pit of a wormy peach or apricot.

The adult is a small greyish moth with narrow fringed wings. They are weak fliers and move with a zig-zag flight.

Life-history and Habits. The winter is passed as a worm in silk-lined burrows located under the roughened bark in the crotches of the trees. If one examines the crotches of the trees carefully in the winter, the location of these winter cells may be determined through the location of little "chimneys" of frass which the worms construct above their nest.



Fig. 2. Illustration showing crotch of tree with winter burrows of peach twig-miner.

The larvae leave these winter nests in early April, migrating to the blossom buds and growing tips of the trees. They tunnel into the buds and twigs, mining up and down the inside and causing them to blight and die. The worms are mature in late April, and change to the chrysalis stage in early May.

The adult moths come out in late May and early June. Eggs are placed on the bark of the terminal twigs, usually near the base of a leaf. The new brood of worms appear during the last half of June. It is this brood of worms that attack the young fruits.

These worms are full grown in late July. They form chrysalids during August, and the second brood of moths come out and are actively laying eggs in the field in late August and September. The worms hatching from these eggs feed sparingly and during the fall seek the crotches of the trees, where they prepare their winter quarters and go into hibernation.

The Injury. Both old and young trees are heavily attacked. Two types of injury occur. Buds are blighted, terminal twigs are killed, and blossoms frayed and destroyed by these early spring worms. It is no uncommon occurrence for the tops of young trees to be so seriously blighted by this worm attack as materially to change or even destroy the shape of the tree.

The worms of the second brood attack the fruit, tunneling into young prunes when the fruit is about one-fifth grown. Usually the worm enters near the stem end and burrows around the forming fruit pit within. This causes the infested fruit to drop. On peaches and apricots, the twig miner occurs as a worm in the ripe fruit. In unsprayed orchards the wormy fruit will often average 18 to 30 percent of the crop.

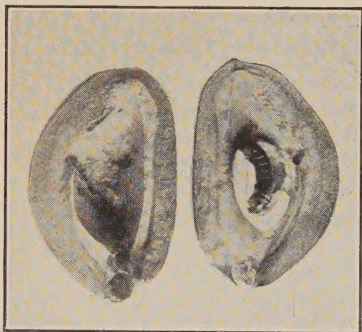


Fig. 3. Peach twig-miner larva in young prune fruit.

Control. Sprays applied for control late in the season after the injury is apparent are of little avail in twig-miner control.

Commercial lime-sulfur 10 to 100 (1 to 10) applied any time from late February up until the early pink stage of the blossom buds has given excellent results in trials made at the Experiment Station. This is our standard control spray.

Lime-sulfur 8 to 100 plus lead arsenate 2 to 100 applied just before blossoming has given excellent results in control. Nicotine sulfate, 40 percent, at the rate of one pint to 100 gallons of water applied while the trees are in full blossom gave practically 100 percent control

in some recent tests. The addition of one pound of casein spreader, or four pounds of whale-oil soap, is advisable where using the nicotine spray.

Using any one of the recommendations given above, one application of spray, well timed and thoroughly applied, will effectively control the twig-miner.